

NOSB NATIONAL LIST FILE CHECKLIST

CROPS

MATERIAL NAME: #16 Sodium silicate



NOSB Database Form



References



MSDS (or equivalent)



TAP Reviews from: Walter Jeffery

**NOSB/NATIONAL LIST
COMMENT FORM
CROPS**

Material Name: #16 Sodium silicate

Please use this page to write down comments, questions, and your anticipated vote(s).

COMMENTS/QUESTIONS:

1. In my opinion, this material is:
_____ Synthetic _____ Non-synthetic.

2. This material should be placed on the proposed National List as:
_____ Prohibited Natural _____ Allowed Synthetic.

TAP REVIEWER COMMENT FORM for USDA/NOSB

Use this page or an equivalent to write down comments and summarize your evaluation regarding the data presented in the file of this potential National List material. Complete both sides of page. Attach additional sheets if you wish.

This file is due back to us by: Aug. 5, 1996

Name of Material: Sodium Silicate

Reviewer Name: WALTER JEFFERY RECEIVED JUL 29 1996

Is this substance Synthetic or non-synthetic? Explain (if appropriate)

synthetic

If synthetic, how is the material made? (please answer here if our database form is blank) produced by the reaction of high purity quartz sand and sodium carbonate or by dissolving finely ground sand in sodium hydroxide

This material should be added to the National List as:

☒ Synthetic Allowed ☐ Prohibited Natural

or, ☐ Non-synthetic (This material does not belong on National List)

Are there any use restrictions or limitations that should be placed on this material on the National List?

Please comment on the accuracy of the information in the file:

not much info

Any additional comments? (attachments welcomed)

Do you have a commercial interest in this material? ☐ Yes; ☒ No

Signature Walter Jeffery Date 7/24/96

Please address the 7 criteria in the Organic Foods Production Act:
(comment in those areas you feel are applicable)

- (1) the potential of such substances for detrimental chemical interactions with other materials used in organic farming systems;

little potential for detrimental interaction

- (2) the toxicity and mode of action of the substance and of its breakdown products or any contaminants, and their persistence and areas of concentration in the environment;

non-toxic, long considered inert nuisance material

- (3) the probability of environmental contamination during manufacture, use, misuse or disposal of such substance;

not likely

- (4) the effect of the substance on human health;

not a hazard

- (5) the effects of the substance on biological and chemical interactions in the agroecosystem, including the physiological effects of the substance on soil organisms (including the salt index and solubility of the soil), crops and livestock;

- (6) the alternatives to using the substance in terms of practices or other available materials; and

- (7) its compatibility with a system of sustainable agriculture.

NOSB Materials Database

1

Identification

Common Name	Sodium Silicate	Chemical Name	
Other Names			
Code #: CAS	Reg. No. 1344-09-8	Code #: Other	
N. L. Category	Synthetic Allowed	MSDS	<input checked="" type="radio"/> yes <input type="radio"/> no

Chemistry

Family
Composition
Properties
How Made

Use/Action

Type of Use Crops
Specific Use(s) floating tree fruits
Action
Combinations

Status

OFPA
N. L. Restriction
EPA, FDA, etc
Directions
Safety Guidelines
Historical status
International status

1 - PRODUCT IDENTIFICATION

PRODUCT NAME: SODIUM SILICATE SOLUTION
FORMULA: $\text{Na}_2\text{O}(\text{SiO}_2)_x(\text{H}_2\text{O})_y$
FORMULA WT: .00
CAS NO.: 01344-09-8
COMMON SYNONYMS: WATER GLASS; SOLUBLE GLASS; SILICATE OF SODA
PRODUCT CODES: 3877
EFFECTIVE: 10/24/85
REVISION #01
PRECAUTIONARY LABELLING
BAKER SAF-T-DATA(TM) SYSTEM
HEALTH - 1 SLIGHT
FLAMMABILITY - 0 NONE
REACTIVITY - 0 NONE
CONTACT - 2 MODERATE
HAZARD RATINGS ARE 0 TO 4 (0 = NO HAZARD; 4 = EXTREME HAZARD).
LABORATORY PROTECTIVE EQUIPMENT
SAFETY GLASSES; LAB COAT
PRECAUTIONARY LABEL STATEMENTS
WARNING
CAUSES IRRITATION
AVOID CONTACT WITH EYES, SKIN, CLOTHING.
KEEP IN TIGHTLY CLOSED CONTAINER. WASH THOROUGHLY AFTER HANDLING.
SAF-T-DATA(TM) STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

2 - HAZARDOUS COMPONENTS

COMPONENT% CAS NO.
SODIUM SILICATE 35-40 1344-09-8

3 - PHYSICAL DATA

BOILING POINT: 102 C (216 F) VAPOR PRESSURE(MM HG): 18
MELTING POINT: N/A VAPOR DENSITY(AIR=1): N/A
SPECIFIC GRAVITY: 1.30 EVAPORATION RATE: N/A
(H₂O=1) (BUTYL ACETATE=1)
SOLUBILITY(H₂O): COMPLETE (IN ALL PROPORTIONS) % VOLATILES BY VOLUME: 70-80

APPEARANCE & ODOR: COLORLESS, TURBID LIQUID WITH NO ODOR OR SLIGHTLY
SOAPY ODOR

4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (CLOSED CUP N/A
FLAMMABLE LIMITS: UPPER - N/A % LOWER - N/A %
FIRE EXTINGUISHING MEDIA
USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.

5 - HEALTH HAZARD DATA

CARCINOGENICITY: NTP: NO IARC: NO Z LIST: NO OSHA REG: NO
EFFECTS OF OVEREXPOSURE

CONTACT WITH SKIN OR EYES MAY CAUSE IRRITATION.

TARGET ORGANS

NONE IDENTIFIED

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

NONE IDENTIFIED

ROUTES OF ENTRY

NONE INDICATED

EMERGENCY AND FIRST AID PROCEDURES

IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT
LEAST 15 MINUTES. FLUSH SKIN WITH WATER.

6 - REACTIVITY DATA

STABILITY: STABLEHAZARDOUS POLYMERIZATION: WILL NOT OCCUR

INCOMPATIBLES: MINERAL ACIDS, ORGANIC ACIDS, MOST COMMON METALS,
ORGANIC MATERIALS

7 - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN THE EVENT OF A SPILL OR DISCHARGE

WEAR SUITABLE PROTECTIVE CLOTHING. TAKE UP WITH SAND OR OTHER NONCOM-
BUSTIBLE ABSORBENT MATERIAL AND PLACE INTO CONTAINER FOR LATER DISPOSAL.
FLUSH SPILL AREA WITH WATER.

DISPOSAL PROCEDURE

MSDS for SODIUM SILICATE SOLUTION Page 3

DISPOSE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL
ENVIRONMENTAL REGULATIONS.

8 - PROTECTIVE EQUIPMENT

VENTILATION: USE ADEQUATE GENERAL OR LOCAL EXHAUST VENTILATION
TO KEEP VAPOR AND MIST LEVELS AS LOW AS POSSIBLE.

RESPIRATORY PROTECTION: NONE REQUIRED WHERE ADEQUATE VENTILATION
CONDITIONS EXIST. IF AIRBORNE CONCENTRATION IS
HIGH, USE AN APPROPRIATE RESPIRATOR OR DUST MASK.

EYE/SKIN PROTECTION: SAFETY GOGGLES, UNIFORM, APRON, RUBBER GLOVES ARE
RECOMMENDED.

9 - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATA(TM) STORAGE COLOR CODE: ORANGE (GENERAL STORAGE)

SPECIAL PRECAUTIONS

KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STORAGE
AREA.

10 - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

